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                 STN pricing information for 2008 now available
NEWS
         JAN 16
                 CAS patent coverage enhanced to include exemplified
                 prophetic substances
         JAN 28
                 USPATFULL, USPAT2, and USPATOLD enhanced with new
NEWS
                 custom IPC display formats
         JAN 28
NEWS
                 MARPAT searching enhanced
NEWS
         JAN 28
                 USGENE now provides USPTO sequence data within 3 days
                 of publication
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         JAN 28
                 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS
         JAN 28
                 MEDLINE and LMEDLINE reloaded with enhancements
NEWS
         FEB 08. STN Express, Version 8.3, now available
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         FEB 20
                 PCI now available as a replacement to DPCI
         FEB 25
                 IFIREF reloaded with enhancements
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NEWS 12
         FEB 25
                 IMSPRODUCT reloaded with enhancements
NEWS 13
         FEB 29
                 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                 U.S. National Patent Classification
NEWS 14
         MAR 31
                 IFICDB, IFIPAT, and IFIUDB enhanced with new custom
                 .IPC display formats
NEWS 15
         MAR 31
                 CAS REGISTRY enhanced with additional experimental
                 spectra
NEWS 16
         MAR 31
                 CA/CAplus and CASREACT patent number format for U.S.
                 applications updated
NEWS 17
         MAR 31
                 LPCI now available as a replacement to LDPCI
         MAR 31
                 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS.18
NEWS 19
         APR 04
                 STN AnaVist, Version 1, to be discontinued
NEWS 20
         APR 15
                 WPIDS, WPINDEX, and WPIX enhanced with new
                 predefined hit display formats
         APR 28
                 EMBASE Controlled Term thesaurus enhanced
NEWS 21
NEWS 22
        APR 28
                 IMSRESEARCH reloaded with enhancements
NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
             AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008
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              STN Operating Hours Plus Help Desk Availability
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FILE CONTENT: 1840 - 10 May 2008 VOL 148 ISS 20

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> Uploading C:\Program Files\Stnexp\Queries\AL1.str product

L1STRUCTURE UPLOADED

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STRUCTURE UPLOADED L2

=> S L1 FULL FULL SEARCH INITIATED 18:00:27 FILE 'CASREACT' 23160 REACTIONS TO VERIFY FROM 5791 DOCUMENTS SCREENING COMPLETE -

1392 DOCS 100.0% DONE 23160 VERIFIED 4735 HIT RXNS SEARCH TIME: 00.00.01

L3 1392 SEA SSS FUL L1 (4735 REACTIONS)

=> S L3 AND LITHIUM METAL 25160 LITHIUM 51803 METAL 106 LITHIUM METAL (LITHIUM(W)METAL)

6 L3 AND LITHIUM METAL

=> D L4 IBIB ABS CRD 1-6

L4

ANSWER 1 OF 6 CASREACT COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 143:248504 CASREACT Method for producing alkyl lithium compounds and aryl TITLE:

lithium compounds by monitoring the reaction by means

of ir-spectroscopy

INVENTOR(S):

Weiss, Wilfried; Dawidowski, Dirk; Pleyer, Walter;

Krueckel, Frank

PATENT ASSIGNEE(S):

Chemetall G.m.b.H., Germany

SOURCE:

PCT Int. Appl., 32 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

German

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO. K						KIND DATE				APPLICATION NO. DATE								
	WO 2005082911			A1 20050909			WO 2005-EP1954						20050224						
		. W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
•			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,	
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	
			SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	ŲS,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,	
				-	-		MD,	•	-	-	-	-	-		-	-	-	-	
			•	•	•	•	GB,	•	•	•	•	•	•				•		
			•	•	•	•	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	
				NE,		•													
									DE 2004-10200400944520040 EP 2005-733858 20050224										
	EΡ																		
		R:					CY,										HU,	ΙE,	
							LU,												
		1922																	
		2006												-	2006				
		2007				1	2007	0705							2006				
PRIO	PRIORITY APPLN. INFO									-					4452		227		
WO .											0 20	U5-E	P195	4	2005	0224			

The invention relates to a method for producing alkyl lithium compds. and aryl lithium compds. by reacting lithium metal with alkyl or aryl halogenides in a solvent, the concentration of the alkyl/aryl halogenide and the alkyl/aryl lithium compound being detected according to an in-line measurement in the reactor by IR spectroscopy, and an exact recognition of the end point of the dosing of the halogenide constituents being carried out by evaluation of the IR measurement. Said method enables an optimum reactive process and reaction yield. The identification of the resp. concentration of the adduct and the product is a reliable reactive process. The yield of the reaction is also optimized by determining the end point of the halogenide dosing, as is the purity of the product due to a lower concentration thereof during the reaction.

RX(1) OF 5

OTHER SOURCE(S):

$$H_3C-CH_2-CH_2-CH_2-C1$$
 Li, Na, Hexane $H_3C-CH_2-CH_2-CH_2-Li$

MARPAT 143:248504

CON: 280 minutes, room temperature

RX(2) OF 5

C1

$$H_3C-CH-CH_2-CH_3$$

Li, Na, Hexane

 $H_3C-CH-CH_2-CH_3$

95%

CON: 75 minutes, 40 deg C, 290 atm

RX(3) OF 5

NOTE: tert-butyllithium mediated CON: 144 minutes, room temperature

RX(4) OF 5

C1-
$$(CH_2)_5$$
-Me Li, Na, Hexane Li- $(CH_2)_5$ -Me 95%

CON: 40 deg C, 290 atm

RX(5) OF 5

CON: 4 hours, 35 deg C

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 6 CASREACT COPYRIGHT 2008 ACS on STN

1

ACCESSION NUMBER:

142:114226 CASREACT

TITLE:

Tetrasilyl-substituted cyclobutadiene dianion

dilithium salt: synthesis and structure

AUTHOR(S):

Sekiguchi, A.; Matsuo, T.; Tanaka, M.; Watanabe, H.;

Nakamoto, M.

CORPORATE SOURCE:

Department of Chemistry, University of Tsukuba,

Tsukuba, Ibaraki, 305 8571, Japan

SOURCE:

Russian Chemical Bulletin (Translation of Izvestiya Akademii Nauk, Seriya Khimicheskaya) (2004), 53(5),

1109-1115

CODEN: RCBUEY; ISSN: 1066-5285

DOCUMENT TYPE:

Kluwer Academic/Consultants Bureau

Journal

PUBLISHER: LANGUAGE:

English

The reaction of tetrakis(trimethylsilyl)cyclobutadienylcyclopentadienyl cobalt complex (Me3Si) 4C4CoCp with lithium metal in THF yielded the dilithium salt of cyclobutadiene dianion CBD2- stabilized by four trimethylsilyl groups, Li+2[(Me3Si)4C4]2-. The bridged CBD2dianion was also synthesized by a similar procedure starting from the bridged cobalt complex, which was prepared from the reaction of 2,2,5,5,8,8,11,11-octamethyl-2,5,8,11-tetrasilacyclododeca-1,6-diyne with CpCo(CO)2 in refluxing octane. The aromaticity of the CBD2- is discussed on the basis of the structural characteristics and magnetic properties.

RX(1) OF 6 - REACTION DIAGRAM NOT AVAILABLE

RX(5) OF 6 - 2 STEPS

$$Me_{3}Si-C=C-SiMe_{3} \qquad \frac{1. CpCoCl2}{2. Li, THF} \rightarrow Me_{3}Si \qquad \begin{array}{c} Li \\ \\ Me_{3}Si \end{array} \qquad SiMe_{3}$$

$$100\%$$

CON: STEP(1) 5 days, reflux

STEP(2) 24 hours, room temperature

REFERENCE COUNT: 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 CASREACT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

136:232391 CASREACT

TITLE:

Chemical process and plant for n-butyl lithium

manufacture

INVENTOR(S):

Buckley, Glyn Jeffrey; Stairmand, John William; Bowe,

Michael Joseph

PATENT ASSIGNEE(S):

Accentus PLC, UK

SOURCE:

PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
PATENT NO.
                            KIND
                                    DATE
                                                       APPLICATION NO.
                                                                              DATE
                                                                              20010905
                                    20020314
                                                       WO 2001-GB3982
      WO 2002020151
                             A1
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
                HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
                 RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
                 VN, YU, ZA, ZW
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
      AU 2001084277
                                    20020322
                                                       AU 2001-84277
                                                                              20010905
                                                       'EP 2001-963247
      EP 1320413
                             A1
                                    20030625
                                                                              20010905
      EP 1320413
                              B1
                                    20060405
                AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
      JP 2004508171
                                    20040318
                                                      JP 2002-524623 20010905
      US 20030168330
                                    20030911
                                                        US 2003-343786
                                                                              20030204
                             A1
      US 6841095
                              B2
                                    20050111
PRIORITY APPLN. INFO.:
                                                        GB 2000-22016
                                                                              20000908
                                                        WO 2001-GB3982
                                                                              20010905
```

AB A chemical plant for performing a chemical reaction between particles of a material such as lithium metal, and a reagent such as Bu chloride in solution in hexane, in which one reaction product is a solid material, includes a reaction vessel. Several ultrasonic transducers are attached to a wall of the vessel to irradiate ultrasonic waves into the vessel, the vessel being large enough that each transducer irradiates into fluid at least 0.1 m thick, each transducer irradiating no >3 W/cm2, and the transducers being sufficiently close to each other and the number of transducers being sufficiently high that the poser dissipation within the vessel is at least 10 W/L but no >200 W/L. The high intensity of ultrasound ensures that lithium chloride is cleaned off the surface of the lithium metal particles throughout the vessel.

RX(1) OF 1

REFERENCE COUNT:

 $H_3C-CH_2-CH_2-CH_2-C1$ Li, Hexane $H_3C-CH_2-CH_2-CH_2-Li$

NOTE: ultrasound, industrial scale, ultrasound is used to break the

byproduct lithium chloride off of the lithium metal

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

L4 ANSWER 4 OF 6 CASREACT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 129:149087 CASREACT

TITLE: Preparation of alkyllithiums
INVENTOR(S): Iwao, Tetsuya; Yamamura, Kiyoshi

PATENT ASSIGNEE(S): Mitsui Petrochemical Industries, Ltd., Japan; Mitsui

Chemicals Inc.

SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 10182658 A 19980707 JP 1996-345795 19961225

JP 3570835 B2 20040929

PRIORITY APPLN. INFO.: JP 1996-345795 19961225

AB Alkyllithiums are prepared by reaction of alkyl halides with Li containing ≤500 ppm N. BuCl was reacted with Li containing 160 ppm N in hexane at room temperature for 30-40 min, then filtered for 1 min to give 42% BuLi.

RX(1) OF 1

 $H_3C-CH_2-CH_2-CH_2-C1$ Li, Hexane, N2 $H_3C-CH_2-CH_2-CH_2-Li$

NOTE: room temp. 30-40 min

L4 ANSWER 5 OF 6 CASREACT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 123:112396 CASREACT

TITLE: Process of preparing trimethylsilyloxy functionalized

alkyllithium compounds

INVENTOR(S): Schwindeman, James A.

PATENT ASSIGNEE(S): FMC Corp., USA SOURCE: U.S., 5 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	CENT	NO.		KI	DN	DATE			A	PPLI	CATI	ON NO	ο.	DATE			
									-								
US	5403	3946		А		1995	0404		U	S 19	94-2	7972	1	1994	0725		
US	5543	3540		Α		1996	0806		U	S 19	94-3	4182	2	1994	1121		
WO	9603	3408		A.	1	1996	0208		W	O 19	95-บ	S925	6	1995	0724		
•	W:	AM,	AT,	ΑU,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CZ,	DE,	DK,	ΕĖ,	ES,	FI,
		GB,	GE,	ΗU,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LK,	LR,	LT,	LU,	LV,	MD,
		MG,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	ТJ,

TT, UA RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG AU 9531410 19960222 AU 1995-31410 19950724 EP 800525 EP 1995-927358 Α1 19971015 19950724 EP 800525 В1 20030409 R: DE, FR, GB, NL JP 10504813 . Т 19980512 JP 1996-505889 19950724 US 5912378 Α 19990615 US 1997-851324 19970505 PRIORITY APPLN. INFO.: US 1994-279721 19940725 US 1994-341822 19941121 WO 1995-US9256 19950724 US 1996-637192 19960408

OTHER SOURCE(S): MARPAT 123:112396

AB A process for producing compds. of the formula Me3SiORLi (R = C2-10 alkyl, C6-10 aryl) by reacting haloalc. HORX (R = same, X = C1, Br) with hexamethyldisilazane, in an inert atmospheric in hydrocarbon solvent, at a temperature

between 20° and reflux temperature of the solvent followed by lithiation with powdered lithium metal, is described. Thus, reaction of 3-chloro-2,2-dimethyl-1-propanol with hexamethyldisilazane in cyclohexane gave 3-chloro-2,2-dimethyl-1-trimethylsiloxypropane which on lithiation with lithium dispersion gave title compound, 3-chloro-2,2-dimethyl-1-trimethylsiloxypropyllithium.

RX(5) OF 9

Me₃Si-O-(CH₂)₃-Cl

Li, Cyclohexane

Me₃Si-O-(CH₂)₃-Li

9%

RX(6) OF 9
$$Me_{3}Si-O-(CH_{2})_{6}-C1 \qquad \underline{Li, Cyclohexane} \qquad Me_{3}Si-O-(CH_{2})_{6}-Li$$

$$4%$$

RX(7) OF 9 - 2 STEPS

NOTE: 1) TMS-CL ADDED IN TWO BATCHES WITH HEATING BETWEEN ADDITIONS

RX(8) OF 9 - 2 STEPS

$$\begin{array}{c} \text{Me}_3\text{Si-NH-SiMe}_3 \\ & \xrightarrow{\text{Cyclohexane}} \\ & \xrightarrow{\text{Cyclohexane}} \\ & \xrightarrow{\text{Me}_3\text{Si-O-}(\text{CH}_2)}_3\text{-Li} \\ & \xrightarrow{\text{1.2. Me}_3\text{SiCl}}_{\text{2. Li, Cyclohexane}} \\ \end{array}$$

NOTE: 1) TMS-CL ADDED IN TWO BATCHES WITH HEATING BETWEEN ADDITIONS

RX(9) OF 9 - 2 STEPS

C1- (CH₂)₆-OH
$$\begin{array}{c}
1.1. \text{ (Me3Si) 2NH,} \\
\underline{\text{Cyclohexane}} \\
1.2. \text{ Me3SiCl} \\
2. \text{ Li, Cyclohexane}
\end{array}$$
Me₃Si-O- (CH₂)₆-Li
4%

NOTE: 1) TMS-CL ADDED IN TWO BATCHES WITH HEATING BETWEEN ADDITIONS

L4 ANSWER 6 OF 6 CASREACT COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:

110:212879 CASREACT

TITLE:

Isolation and characterization of 1,2-

dilithio[tetrakis(trimethylsilyl)]ethane. The first crystal structure of nonconjugated 1,2-dilithioethane Sekiguchi, Akira; Nakanishi, Tetsuo; Kabuto, Chizuko;

AUTHOR(S):

Sakurai, Hideki

CORPORATE SOURCE:

Fac. Sci., Tohoku Univ., Sendai, 980, Japan

SOURCE:

Journal of the American Chemical Society (1989),

111(10), 3748-50

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Careful reduction of tetrakis(trimethylsilyl)ethylene with lithium

metal in THF gave thea very hygroscopic and air sensitive title compound (I), the first nonconjugated 1,2-dilithioethane derivative NMR spectra, chemical reactions, and x-ray crystallog. data of I are described.

RX(1) OF 8

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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